



SPONSOR: Sen. Hansen & Rep. Burns
Sens. Hoffner, Huxtable, Lockman, Pettyjohn,
Richardson, Seigfried, Sokola, Walsh, Wilson; Reps.
Lambert, Morrison, Neal, Snyder-Hall

DELAWARE STATE SENATE
153rd GENERAL ASSEMBLY

SENATE JOINT RESOLUTION NO. 3

DIRECTING ALL ELECTRIC PUBLIC UTILITIES IN DELAWARE TO PARTICIPATE IN A STUDY TO BE UNDERTAKEN BY THE DELAWARE SUSTAINABLE ENERGY UTILITY TO ASSESS AND ANALYZE THE COSTS AND BENEFITS OF THE ADOPTION OF ENERGY STORAGE SYSTEMS IN DELAWARE, AND DIRECTING THE DELAWARE SUSTAINABLE ENERGY UTILITY TO CONDUCT A PILOT PROGRAM WITH THE PARTICIPATION AND COOPERATION OF CERTAIN ELECTRIC UTILITIES TO DEVELOP AND DEPLOY PILOT PROJECTS INVOLVING BATTERY STORAGE SYSTEMS IN DELAWARE.

1 WHEREAS, an Energy Storage System is a technological device or group of devices that store energy generated
2 from various sources, like solar or wind power, so it can be used later when needed, essentially acting as a buffer to balance
3 electricity supply and demand by storing excess energy during peak production periods and releasing it during high demand
4 times; and

5 WHEREAS, Energy Storage Systems provide several benefits for electric grids, including: grid stabilization by
6 managing peak demand, providing backup power during outages, reducing electricity costs by storing energy during low
7 demand periods, and overall enhancing grid resilience, allowing for more efficient and reliable power delivery by adjusting
8 supply to meet demand fluctuations, and enabling the grid to withstand periodic shocks and stressors; and

9 WHEREAS, Energy Storage Systems can provide substantial cost-savings to commercial and industrial electricity
10 customers who can deploy on-site energy storage to reduce their electricity demand and associated demand charges, which
11 are generally based on their highest observed levels of electricity consumption during peak demand periods; and

12 WHEREAS, Energy Storage Systems result in savings to residential electricity customers by flattening electricity
13 demand and thereby reducing peak electricity demand charges, in addition to benefitting the supply of electricity in the PJM
14 transmission region, to which Delaware belongs; and

15 WHEREAS, localized pockets of increasing electricity demand sometimes require electric utilities to upgrade
16 existing or build new, expensive substations, and power transmission and distribution lines. Energy Storage Systems at
17 strategic locations on the grid can help utilities to manage growing electricity demand at lower cost than upgrading or
18 expanding electric grid infrastructure, resulting in savings to electricity customers; and

19 WHEREAS, Energy Storage Systems provide greater and more effective use of intermittent solar and wind energy
20 resources. Pairing or co-locating an on-grid Energy Storage System with solar and wind energy power generators allow
21 them to respond to supply requests from electric grid operators when direct generation from solar and wind resources is not

22 available or limited. Alternatively, an Energy Storage System can help solar and wind power plants avoid reducing or
23 curtailing generation when the availability of those resources exceeds electricity demand or power transmission line
24 capacity or as required by grid operators; and

25 WHEREAS, Energy Storage Systems commonly involve the use of batteries, and, more recently, hydrogen, but can also
26 involve technologies like compressed air or pumped hydro storage; and

27 WHEREAS, utility-scale battery energy storage systems have been growing quickly as a source of electric power capacity
28 in the United States in recent years. In the first seven months of 2024, operators added 5 gigawatts (GW) of capacity to the U.S.
29 electric power grid. In 2010, only 4 megawatts (MW) of utility scale battery energy storage were added in the United States. In July
30 2024, more than 20.7 GW of battery storage capacity was available in the United States; and

31 WHEREAS, the construction of Energy Storage Systems in Delaware will promote economic development by providing
32 a safer and more reliable electricity supply to Delaware businesses and residents, thereby increasing economic growth and spurring
33 job creation.

34 NOW, THEREFORE:

35 BE IT RESOLVED by the Senate and the House of Representatives of the 153rd General Assembly of the State of
36 Delaware, with the approval of the Governor, that the Delaware Sustainable Energy Utility (“DESEU”) is directed to
37 initiate and undertake a study to assess and analyze the costs and benefits of the adoption of Energy Storage Systems, both
38 in front of and behind the meter. All electric public utilities in Delaware shall participate in and cooperate with the DESEU
39 study.

40 BE IT FURTHER RESOLVED that in the design and execution of the Energy Storage System study, the DESEU
41 will work with the State Energy Office, the Delaware Public Service Commission, the Division of the Public Advocate,
42 experts at the University of Delaware, the electric public utilities in Delaware, including the Delaware Municipal Electric
43 Corporation and the Delaware Electric Cooperative, and other interested stakeholders.

44 BE IT FURTHER RESOLVED that the feasibility study shall include, but is not limited to: regulatory issues, the
45 potential value of battery storage for demand reduction, the use of battery storage to avoid or defer investments in
46 distribution and transmission infrastructure, and the incremental benefits of storage when paired with renewable energy
47 systems. The study shall also identify grid service value streams provided by battery storage systems, including local peak
48 demand reduction, resilience, and voltage stabilization, with transparent methodologies for quantification. The DESEU
49 study shall also explore, among other related topics, the following: a) the use of energy storage, both in front of and behind
50 the meter, b) the value of storage to the electric grid, c) where storage may best be placed, for example at transmission or
51 distribution points, d) any land use, environmental, and community impact considerations associated with Energy Storage

52 Systems, e) the legal issues that may need to be addressed in accommodating Energy Storage Systems in communities, f)
53 making the best use of energy storage, g) competitive procurement under different ownership frameworks, h) energy
54 storage credits, i) market-based incentives and mechanisms to assure broad participation of all demographic and income
55 groups, and j) any other mechanism that the DESEU determines is appropriate to study the adoption of beneficial, cost-
56 effective Energy Storage Systems in the State.

57 BE IT FURTHER RESOLVED that each of the electric utilities engaged in the DESEU study are encouraged to
58 develop and implement a customer outreach program to raise awareness of battery storage benefits and incentives.

59 BE IT FURTHER RESOLVED that the DESEU shall work with Delmarva Power & Light Company, the
60 Delaware Municipal Electric Corporation, the Delaware Electric Cooperative, and one independent power producer to
61 conduct a pilot program whereby each of these entities develop and deploy at least one pilot project involving battery
62 storage systems.

63 BE IT FURTHER RESOLVED that the DESEU will provide guidance and a level of funding, in an amount to be
64 determined by the DESEU in its discretion, to Delmarva Power & Light Company, the Delaware Municipal Electric
65 Corporation, and the Delaware Electric Cooperative, to develop and deploy each of the projects involving battery storage
66 systems. Pilot projects should prioritize addressing specific grid challenges, such as peak load reduction, resilience, and
67 hosting capacity improvements. Public Service Commission-regulated utilities shall be entitled to recover all reasonable
68 costs associated with the design, deployment, and operation of these pilot projects, including administrative and
69 Information Technology and Operational Technology systems expenses, less any funding received from the DESEU.
70 Reporting timelines shall allow sufficient time for meaningful data collection to inform future program designs. The battery
71 storage pilot projects may include those already under design, construction, or operation, provided that the funding may
72 only be applied to costs yet to be incurred by the utility.

73 BE IT FURTHER RESOLVED that, in the study, the DESEU shall evaluate and report on the feasibility of
74 constructing additional energy storage projects in Delaware and the projected amount of megawatts of energy storage that
75 might be constructed by December 31, 2030, or the end of some other delivery year that can reasonably be projected to
76 allow for adequate analysis of pilot project outcomes and stakeholder engagement. The study shall focus on foundational
77 issues, including the identification and quantification of value streams and a cost-benefit analysis of storage deployment.

78 BE IT FURTHER RESOLVED that, on or before December 31, 2025, the DESEU shall submit a preliminary
79 status report about the progress of the study and pilot program to the Governor and all members of the General Assembly,
80 with copies to the Director and the Librarian of the Division of Research of Legislative Council, and the Delaware Public
81 Archives.

82 BE IT FURTHER RESOLVED that, on or before June 1, 2026, the DESEU shall submit a comprehensive report
83 detailing the findings from the battery storage pilot program and the cost-benefit study and analysis of Energy Storage
84 Systems in Delaware to the Governor and all members of the General Assembly, with copies to the Director and the
85 Librarian of the Division of Research of Legislative Council, and the Delaware Public Archives.

SYNOPSIS

Energy Storage Systems provide benefits to the electric grid, including grid stabilization, managing peak energy demand, and providing backup power during outages. Energy Storage Systems can provide substantial cost savings to residential, commercial, and industrial electricity customers. The construction of Energy Storage Systems will promote economic growth and job creation in Delaware. This resolution directs the Delaware Sustainable Energy Utility (DESEU) to initiate and undertake a study to assess and analyze the costs and benefits of the adoption of Energy Storage Systems, both in front of and behind the meter, by all electric public utilities in Delaware. The resolution also directs the DESEU to conduct a pilot program and provide guidance and a level of funding, to be determined by the DESEU, to support Delmarva Power & Light Company, the Delaware Municipal Electric Corporation, the Delaware Electric Cooperative, and one independent power producer to deploy at least one battery storage pilot project in Delaware to serve their Delaware service territory. The DESEU is to submit a comprehensive report detailing the findings from the battery storage pilot program and the cost-benefit study and analysis of Energy Storage Systems in Delaware on or before June 1, 2026.

Author: Senator Hansen